



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/081,873	02/22/2002	Hiroki Nagai	388-020337	9910

7590 06/04/2003

Russell D. Orkin
WEBB ZIESENHEIM LOGSDON ORKIN & HANSON, P.C.
700 Koppers Building
436 Seventh Avenue
Pittsburgh, PA 15219-1818

EXAMINER

FISCHMANN, BRYAN R

ART UNIT	PAPER NUMBER
----------	--------------

3618

DATE MAILED: 06/04/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.
10/081,873

Applicant(s)
NAGAI, ET AL

Examiner
Bryan Fischmann

Art Unit
3618



-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on Jul 22, 2002.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above, claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on Feb 22, 2002 is/are a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) ☒ All b) ☐ Some* c) ☐ None of:

1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

*See the attached detailed Office action for a list of the certified copies not received.

- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

a) ☐ The translation of the foreign language provisional application has been received.

- 15) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s). 5
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

Art Unit: 3618

Specification

1. The disclosure is objected to because of the following:

A) The Applicant has not referred to the foreign priority document in the first sentence of the specification as required by Section 202.01 of the MPEP.

B) The following inconsistencies in nomenclature were noted:

1) Line 19 of page 19 recites "partition wall members...54". Line 8 of page 20 recites "duct 54".

To avoid confusion to the reader, and to facilitate identifying components by nomenclature in the claims, it is requested Applicant use consistent nomenclature for the same reference number throughout the specification.

Drawings

2. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference signs not mentioned in the description: 13, A1-A3, 40f, 55, W6, 17h and 17i. Correction is required.

3. Figure 5 is objected to, as the upper hood is labeled as 16 and the lower hood is labeled as 17. This is in contradiction to the other drawing figures and the specification.

Art Unit: 3618

Claim Objections

4. Claims 12 and 13 are objected to because of the following:

A) Claim 12 recites "...a portion of said partition wall member extending to a position adjacent said cooling air intake opening to take in ambient air drawn in through a position above the lower end of said upper hood".

The above recitation is objected to as the partition wall member does not "take in ambient air". The words "take in" would imply that a suction is being created, such as a carburetor "takes in" ambient air.

It is the Examiner's position that the "partition wall member", or a portion of it, merely "guides", or "allows passage" of the ambient air.

See also a similar recitation in claim 13.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

6. Claim 13 is rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventors, at the time the application was filed, had possession of the claimed invention.

Art Unit: 3618

Claim 13 recites "...said cooling air intake opening is formed in said control panel, said portion of said partition wall member being part of a lower surface thereof and extending rearwardly of said lawn mower to take in ambient air from said cooling air intake opening".

As best understood, the control panel is reference number 11, the cooling air intake opening formed in the control panel is one of the opening associated with reference number 14 on Figure 7, the partition wall member is reference number 32 and the lawn mower is the entire vehicle assembly based on wording in the preamble of claim 12.

Inadequate written description was found for the following:

A) Note that the drawing figures show that the partition wall member is part of the upper hood 17, not part of the control panel 11. Also note that the partition wall member is located proximal to an upper portion of the control panel, not a lower portion.

B) Note that since the "lawn mower", as best understood from the preamble of claim 12, is the entire vehicle assembly, that it would not seem possible for any portion of the partition wall member to "extend rearwardly" of the vehicle assembly. Note that if the Applicant is referring to reference number 4 by the recitation of "lawn mower", that the above recitation is still not consistent with the drawing figures. Note that reference number 4 is described as "mower unit" in the specification.

For purposes of examination, any partition wall member proximal to a forward end of a control panel will be assumed to meet the above limitation.

Art Unit: 3618

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. Claims 12 and 13 are rejected under 35 U.S.C. 102(b) as being anticipated by Imanishi, et al, US Patent 5,678,648.

Imanishi teaches an engine cooling system for use on a lawn mover having a vertical shaft type engine (E) with a cooling air intake fan (12) disposed above the engine, comprising:

a fan cover (20) for covering the fan;

a hood for covering said engine, said hood including:

an upper hood (4A) having a lower end located above a lower end of said fan cover

(Figure 1); and

a lower hood (4B);

wherein said upper hood is displaceable between a closed position adjacent said lower hood and an open position (about hinge shown on Figure 2);

a cooling air intake opening (17A) formed in at least one of said upper hood adjacent a control panel (not selected) and said control panel (17- selected) for taking in ambient air; and

Art Unit: 3618

a partition wall member (21) disposed between said cooling air intake opening and said cooling air intake fan (see Figures 2 and 4) for restricting mixing of ambient air drawn by said fan and heat generating from said engine (see comments below), a portion of said partition wall member extending to a position adjacent said cooling air intake opening (see comments below) to take in ambient air drawn in through a position above the lower end of said upper hood (see claim objection portion of the office action, noting reference number 21 assists in “guiding” ambient air).

Regarding the claim 12 limitation “for restricting mixing of ambient air drawn by said fan and heat generating from said engine”, it is noted this limitation is functional language. The functional recitation of intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the function or intended use, then it meets the claim. *In re Casey*, 370 F.2d 576, 152 USPQ 235, 238 (CCPA 1967). It is the Examiner’s position that the prior art is *capable* of performing the recited functions.

Once this prima facie case has been established, the burden shifts to the applicant to show that the prior art structure does not possess the functionally defined limitations of his claimed apparatus. *In re Schreiber*, 128 F.3d 1473, 44 USPQ2d 1429, 1432 (Fed. Cir. 1997).

Regarding the claim 12 limitation “a portion of said partition wall member extending to a position adjacent said cooling air intake opening”, note that Webster’s Collegiate Dictionary,

Art Unit: 3618

10th Edition, defines "adjacent" as: "not distant". Note that Figures 2 and 4 show that the aft portion of reference number 21 is not "distant" from reference number 17A.

Regarding claim 13, see Figures 1 and 2 and the 112 1st and claim objection portion of this Office Action.

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 1-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Imanishi, et al, US Patent 5,678,648, in view of Holm, et al, US Patent 4,969,533.

Imanishi teaches an engine enclosure for use on a vehicle having a cooling system for a vertical shaft type engine (E) with a cooling air intake fan (12) disposed above the engine, said engine enclosure comprising:

an upper hood (4A) for covering said engine from above, said upper hood having an upper surface and right and left side surfaces extending downward from said upper surface; and
a lower hood (4B) for covering lateral areas of said engine.

Imanishi fails to teach a cooling air intake opening formed in a position above a lower end of at least one of said right and left side surfaces of said upper hood for taking in ambient air.

Art Unit: 3618

However, Holm teaches a cooling air intake opening (54) formed in a position above a lower end of at least one of the right and left side surfaces of an upper hood for taking in ambient air (Figure 11). An intake opening formed on a side surface of an upper hood is advantageous in that the intake opening is relatively high off the ground and forward of the mower unit, which will minimize grass and dust intake. An intake opening formed on a side surface of an upper hood is also advantageous in that it allows the intake velocity to be reduced when coupled with the intake openings of Imanishi, which may reduce noise.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize an intake opening formed on a side surface of the upper hood of Imanishi, as taught by Holm.

Regarding claim 2, see reference number 20 and Figure 2 of Imanishi.

Regarding claim 3, see reference number 21 of Imanishi, or Figure 11 of Holm (horizontal structure in upper hood extending forwardly and rearwardly and guiding inlet air).

Regarding claim 4, note that the "vertical" portion of the partition wall member (horizontal structure in upper hood extending forwardly and rearwardly and guiding inlet air) in Figure 11 of Holm defines a relatively short length of duct.

Regarding claim 5, see Figure 2 of Imanishi, or Figure 11 of Holm.

Regarding claim 6, note hinge structure on Figure 2 of Imanishi.

Art Unit: 3618

Regarding claims 7 and 8, see reference number 21 of Imanishi, or Figure 11 of Holm. Note that although this is the same structure "utilized" in claim 3, note that claims 7 and 8 are dependant upon claim 1, not claim 3.

Regarding claims 9 and 10, see Figure 2 of Imanishi and Figure 1 of Holm.

Regarding claim 11, see Figure 11 of Holm.

Conclusion

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- A) Sherwin - teaches openings in a side of a hood
- B) Kubohara, et al - teaches air cooling for an engine
- C) Yamashita, et al - teaches vehicle similar to Applicant's
- D) Ogasawara, et al - teaches vehicle similar to Applicant's
- E) Vaillancourt, et al - teaches openings in a hood
- F) Japanese Patent 4-66328 - teaches a cooling system
- G) Japanese Patent 4-243629 - teaches an opening in a hood

12. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Bryan Fischmann whose telephone number is (703) 306-5955.

The examiner can normally be reached on Monday through Friday from 7:30 to 4:00.

Art Unit: 3618

If attempts to reach the Examiner by telephone are unsuccessful, the examiner's supervisor, Brian Johnson, can be reached on (703) 308-0885. The fax phone number for the organization where this application or proceeding is assigned is (703) 305-7687.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1113.

Bryan Fischmann 61-3
BRYAN FISCHMANN
PATENT EXAMINER